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EXPEDITED PROCEDURE – EXAMINING GROUP 2144

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Brian C. Gebhardt et al.	Examiner: Greg C. Bengzon
Serial No.:	09/843,614	Group Art Unit: 2144
Filed:	April 25, 2001	Docket No.: 2050.019US1
Title:	SYNCHRONOUS UPDATING OF DYNAMIC INTERACTIVE APPLICATIONS	

APPELLANTS' BRIEF ON APPEAL

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is presented in support of the Notice of Appeal to the Board of Patent Appeals and Interferences, mailed on August 1, 2005 (received by the USPTO on August 4, 2005), from the Final Rejection of claims 1-41 of the above-identified Application, as set forth in the Final Office Action mailed on May 31, 2005, and the Advisory Action mailed on October 4, 2005.

The Commissioner of Patents and Trademarks is hereby authorized to charge Deposit Account No. 19-0743 in the amount of $500.00 which represents the requisite fee set forth in 37 C.F.R. § 41.2(b)(2). The Appellant respectfully requests consideration and reversal of the Examiner's rejections of the pending claims.

1. REAL PARTY IN INTEREST

The real party in interest of the above-captioned patent application is the assignee, Wink Communications, Inc.

2. RELATED APPEALS AND INTERFERENCES

There are no other appeals, interferences, or judicial proceedings known to Appellants that will have a bearing on the Board's decision in the present appeal.

3. STATUS OF THE CLAIMS

The present Application was filed on April 25, 2001 with claims 1-41.

At this time, claims 1-41 are currently pending in the Application. Claims 1-41 stand rejected, and their rejection is appealed herein.

4. STATUS OF AMENDMENTS

No amendments have been made to claims 1-41 subsequent to amending claim 19 for reasons related to clarifying a typographical error, and not for reasons related to patentability.

5. SUMMARY OF CLAIMED SUBJECT MATTER

This summary is presented in compliance with the requirements of Title 37 C.F.R. § 41.37(c)(1)(v), mandating a "concise explanation of the subject matter defined in each of the independent claims involved in the appeal ...". Nothing contained in this summary is intended to change the specific language of the claims described, nor is the language of this summary to be construed so as to limit the scope of the claims in any way.

Claim 1 describes a computer implemented method of updating an interactive application broadcast from a broadcast system (114,116) to a reception device (120) over a transmission medium (118). The method comprises receiving at the broadcast system a broadcast signal including at least one record of a first interactive application (115); selecting a second interactive application (115), and broadcasting records of the second interactive application to the reception device in place of at least some of the records of the first interactive application, for execution of the second interactive application by the reception device; receiving at the broadcast system in the broadcast signal one or more additional records of the first interactive application; and broadcasting from the broadcast system selected ones of the additional records to the reception device, for execution of the second interactive application in conjunction with the additional records. (Figures 1, 3, 7, and 13; Page 14, Lines 28-30; Page 20 Line 17 to Page 21, Line 13; Page 22, Line 7 to Page 23, Line 15; Page 48, table 10; Page 49, Table11; Page 50, table 12; Page 35, Line 4 to Page 37; Page 54, Line 28 to Page 29, Line 17; Page 60, Line 12 to Page 63, Line 8.)

Claim 18 describes a system for updating an interactive application broadcast from a broadcast system (114, 116) to a reception device (120) over a transmission medium(118). The system comprises a code detector (502, 1302) adapted to receive a broadcast signal and identify codes in the signal that relate to a change in a state (802, 804, 806, 808, 1102, 1104, 1106, 1108) of a first interactive application (115), and that provides outputs signals indicative of the change of state; a server that maintains state information for the first interactive application in response to the output signals from the

code detector, and in response to the state of the first interactive application, outputs commands to start or stop the output of updated records of the interactive application; a code reader (1304), adapted to read interactive application codes of an interactive application and to identify records of the first interactive application that are updates of corresponding records of a second interactive application (115) stored in a broadcast server (110), and communicatively coupled to the server, that selectively provides the updated records to the broadcast server (110) in response to the commands from the server; and a broadcast server (110) that broadcasts the second interactive application to reception devices for execution by the reception devices in place of the first interactive application, and selectively broadcasts the updated records to the reception devices, for execution of the second interactive application in conjunction with the updated records. . (Figures 1, 3, 7, and 13; Page 14, Lines 28-30; Page 20 Line 17 to Page 21, Line 13; Page 22, Line 7 to Page 23, Line 15; Page 48, table 10; Page 49, Table11; Page 50, table 12; Page 35, Line 4 to Page 37; Page 54, Line 28 to Page 29, Line 17; Page 60, Line 12 to Page 63, Line 8.)

Claim 40 describes a computer implemented method of updating a customized interactive application broadcast from a broadcast system (114, 116) to a reception device (120) over a transmission medium (118). The method comprises: receiving at the broadcast system a broadcast including at least one record of a first interactive application (115); selecting a customized version of the first interactive application, and broadcasting records of the customized version of the first interactive application to the reception device in place of the records of the first interactive application; receiving at the broadcast system additional records of the first interactive application; and responsive to determining that an additional record is an update of a corresponding record of the customized interactive application, broadcasting the additional record to the reception device, for execution of the customized application in conjunction with the additional record. (Figures 1, 3, 7, and 13; Page 14, Lines 28-30; Page 20 Line 17 to Page 21, Line 13; Page 22, Line 7 to Page 23, Line 15; Page 48, table 10; Page 49, Table11; Page 50, table 12; Page 35, Line 4 to Page 37; Page 54, Line 28 to Page 29, Line 17; Page 60, Line 12 to Page 63, Line 8.)

Claim 41 describes a computer readable medium for updating an interactive application broadcast from a broadcast system (114, 116) to a reception device (120) over a transmission medium (118), the computer readable medium coupled to a processor, for controlling the processor to perform the operations of: receiving at the broadcast system a broadcast signal including at least one record of a first interactive application (115); selecting a second interactive application (115), and broadcasting records of the second interactive application to the reception device in place of at least some of the records of the first interactive application, for execution of the second interactive application by the reception device; receiving at the broadcast system in the broadcast signal one or more additional records of the first interactive application; and providing to a broadcast system selected ones of the additional records for broadcast to the reception device, for the reception device to execute of the second interactive application in conjunction with the additional records. (Figures 1, 3, 7, and 13; Page 14, Lines 28-30; Page 20 Line 17 to Page 21, Line 13; Page 22, Line 7 to Page 23, Line 15; Page 48, table 10; Page 49, Table11; Page 50, table 12; Page 35, Line 4 to Page 37; Page 54, Line 28 to Page 29, Line 17; Page 60, Line 12 to Page 63, Line 8.)

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

6.1 Claims 1-6, 9-13, 17-30, 33-36 and 40-41 were rejected under 35 USC § 103(a) as being unpatentable over Howe et al. (U.S. 6,502,242) in view of Filepp et al. (U.S. 6,195,661).

6.2 Claims 14-16 and 37-39 were rejected under 35 USC § 103(a) as being unpatentable over Howe et al. in view of Filepp et al., and further in view of Chen et al. (U.S. 6,269,374).

6.3 Claims 7-8 and 31-32 were rejected under 35 USC § 103(a) as being unpatentable over Howe et al. in view of Filepp et al., and further in view of Wistendahl (U.S. 6,496,981).

7. ARGUMENT

7.1 The Applicable Law

The Examiner has the burden under 35 U.S.C. § 103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d (BNA) 1596, 1598 (Fed. Cir. 1988). In combining prior art references to construct a *prima facie* case, the Examiner must show some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art that would lead an individual to combine the relevant teaching of the references. *Id.* The M.P.E.P. contains explicit direction to the Examiner that agrees with the *In re Fine* court:

> In order for the Examiner to establish a *prima facie* case of obviousness, three base criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim elements. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Appellant's disclosure. *M.P.E.P.* § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d (BNA) 1438 (Fed. Cir. 1991)).

An invention can be obvious even though the suggestion to combine prior art teachings is not found in a specific reference. *In re Oetiker*, 977 F.2d 1443, 24 U.S.P.Q.2d (BNA) 1443 (Fed. Cir. 1992). However, while it is not necessary that the cited references or prior art specifically suggest making the combination, there must be some teaching somewhere which provides the suggestion or motivation to combine prior art teachings and applies that combination to solve the same or similar problem which the claimed invention addresses. One of ordinary skill in the art will be presumed to know of any such teaching. (See, e.g., *In re Nilssen*, 851 F.2d 1401, 1403, 7 U.S.P.Q.2d 1500, 1502 (Fed. Cir. 1988) and *In re Wood*, 599 F.2d 1032, 1037, 202 U.S.P.Q. 171, 174 (C.C.P.A. 1979)). However, the level of skill is not that of the person who is an innovator but rather that of the person who follows the conventional wisdom in the art.

Standard Oil Co. v. American Cyanamid Co., 774 F.2d 448, 474, 227 U.S.P.Q. 293, 298 (Fed. Cir. 1985). The requirement of a suggestion or motivation to combine references in a *prima facie* case of obviousness is emphasized in the Federal Circuit opinion, *In re Sang Su Lee*, 277 F.3d 1338; 61 U.S.P.Q.2D 1430 (Fed. Cir. 2002), which notes that the motivation must be supported by evidence in the record.

7.2 The References

Howe: recites transitioning from a first analog based television program to a second program.

> ... an approach for viewer-friendly and virtually instantaneous transitioning from a first analog based television program to a second program, particularly an interactive application program, and further permits a similarly rapid and easily accomplished return to viewing the first program. To accomplish this convenient and virtually instantaneous transition between programs such as a broadcast program and an interactive application or program, the present invention provides a system for permitting a provider of program content to furnish a video service provider with content, such as an interactive program or application, and **for permitting the video service provider to transmit to the Content Provider an identifying code or address, such as an interactive callback address. The video service provider associates this identifying code or address with a location at which the program or application will be stored.** The identifying code or callback address may be a program-specific code that can be used by subscribers to invoke the program from the video services provider directly. Alternatively, the identifying code may be a common identifying code or callback address (which might be called a "well-known callback address"), used by all subscribing viewers to access a program- or application-specific identifying code or callback address, which is in turn used to invoke the program. According to the present invention, Content Providers may transmit the identifying code or callback address for a second program in coordination with a first program, so that viewers of the first program, who have access to systems operated by the video service provider, may invoke the second program, which may be an interactive program or application, using that identifying code or callback address. (Col. 3, lines 23-54). (emphasis added).

Howe also recites:

> When the session is terminated, the set top box re-tunes the television signal to the original program channel. (Howe, Abstract).

Howe further recites passing between two different media:

Additionally, television viewers, who are accustomed to choosing at will between the available channels with instantaneous results, will expect *to pass from one medium (e.g., broadcast) to another (e.g., interactive)* "seamlessly" with the push of a button. To accommodate their viewer's needs, programmers may wish to provide broadcast programming, such as a commercial advertisement or a news program, and make available in the context of that program a related interactive television program.

The means by which interactive television and broadcast television are provided, however, are generally quite different. **The two media, for example, are *typically* supplied from different sources and use different modulation techniques over different transmission paths.** The originating source of broadcast programming is likely to be remote from those subscribers interested in invoking an interactive service, making telecommunication between the parties over a dedicated network prohibitively expensive and complex. By contrast, interactive servers, in order to avoid the expense of high bandwidth communications over such distances, can be located geographically close to a corresponding set of subscribers, unlike the programming sources or "Content Providers." An interactive server can therefore efficiently provide exclusive interactive access to a large number of applications by a large number of interactive subscribers. (Howe, Background of the Invention, column 2, line 49 to column 3, line 13). (emphasis added).

Howe further recites the problem being solved by Howe:

The technical differences between broadcast programming and interactive applications, combined with the difficulties of providing interactive services at any rate, make the provision of a smooth transition between interactive and broadcast television a difficult proposition and a seamless transition from broadcast television to interactive television and back an elusive goal. (Howe, Background of the Invention, column 3, lines 14 to 20). (emphasis added).

Howe further recites the problem being solved by Howe:

The technical differences between broadcast programming and interactive applications, combined with the difficulties of providing interactive services at any rate, make the provision of a smooth transition between interactive and broadcast television a difficult proposition and a seamless transition from broadcast television to interactive television and back an elusive goal. (Howe, Background of the Invention, column 3, lines 14 to 20). (emphasis added).

Howe further recites:

Additionally, the present invention permits the Content Provider to transmit with the identifying code or callback address additional information, such as information to be used at the subscriber site to generate a screen image

indicating the availability of additional content from the video service provider. (Howe, column 3, lines 65 to column 4, lines 1-5)

As is evident from the Abstract, Drawings (e.g., see flowcharts shown in Figures 2B, 3B, 4b and 5B) and the Written Description, Howe describes a system and method for switching from one channel to another, e.g., from a program channel being viewed to a different interactive channel, *not switching between two interactive applications*.

Filepp recites:

A method for **locating application records** in an interactive-service database is described. The method features steps for creating multiple search tables which represent subsets of the database to be interrogated; for example the applications of an interactive service. In accord with the method, **steps are provided for arranging the tables with keyword, record locators, indexed to record identifiers** Additionally, the method includes steps for providing each table with a unique coding and steps for generating table codes at the user reception system in response to a query for a database record entered with a variety of search strategies; as for example, character string searching approximating the record sought, alphabetized record searching, subject matter category searching and personalized record searching, among others. Further, the method includes steps for comparing the table code generated with available table codes for the database to select a table suited for the query. Thereafter, the appropriate table is presented at the reception system so the table keywords can be reviewed and a desired record selected and presented. (Filepp, Abstract). (emphasis added).

Chen recites:

A method and apparatus for updating a checksum of a data structure wherein the checksum has an additive property. According to the invention, a word value of a word that is to be modified is eliminated from a checksum to form a current checksum. The current checksum is then updated with a modified word value of a modified word. A system for data structures includes a computer readable and writeable medium and a processor which performs the method of the invention. (Chen, Abstract).

Wistendahl recites a system for converting media content for interactive TV use.

7.3 Discussion of the Rejections Under § 103:

Claims 1-6, 9-13, 17-30, 33-36 and 40-41 were rejected under 35 USC § 103(a) as being unpatentable over Howe et al. (U.S. 6,502,242) in view of Filepp et al. (U.S. 6,195,661). Claims 14-16 and 37-39 were rejected under 35 USC § 103(a) as being unpatentable over Howe et al. in view of Filepp et al., and further in view of Chen et al. (U.S. 6,269,374). Claims 7-8 and 31-32 were rejected under 35 USC § 103(a) as being unpatentable over Howe et al. in view of Filepp et al., and further in view of Wistendahl (U.S. 6,496,981). Because a *prima facia* case of obviousness has not been established in each case, as required by M.P.E.P. § 2142, the Appellant respectfully traverses these rejections.

No proper *prima facie* case of obviousness has been established because even if combined, the references fail to recite all elements of Appellants' claims, and there is no motivation to combine the references. Each of these points will be explained in detail, as follows.

For the following reasons Appellants respectfully submit that the Office Action did not make out a *prima facie* case of obviousness: (1) Howe and Filepp fail to recite all elements of Appellants' claims; and (2) There is a lack of motivation to combine Howe and Filepp to arrive at the present claims.

(1) Even If Combined, Howe And Filepp Fail To Recite All Elements Of Appellants' Claims.

Appellants respectfully submit that the Office Action did not make out a *prima facie* case of obviousness, because Howe and Filepp fail to recite all of the elements of Appellants' claims. M.P.E.P. § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir. 1991)).

Claim 1 includes the elements of:

> receiving at the broadcast system a broadcast signal including at least one record of **a first interactive application**;
>
> **selecting a second interactive application**, and *broadcasting records of the second interactive application to the reception device in place*

> *of at least some of the records of the first interactive application,* **for execution of the second interactive application by the reception device;**
>
> receiving at the broadcast system in the broadcast signal one or more additional records of the first interactive application; and
>
> broadcasting from the broadcast system selected ones of the additional records to the reception device, **for execution of the second interactive application in conjunction with the additional records (emphasis added).**

The Action looks to Howe to recite the above-highlighted elements of claim 1. Appellants submit that these elements of claim 1, including "selecting a second interactive application, and broadcasting records of the second interactive application to the reception device in place of at least some of the records of the first interactive application" are simply not recited in Howe.

The Examiner suggests that Howe recites "records of the second interactive application are broadcast to the reception device in place of at least some of the records of the first interactive application." (Page 3 of the May 2005 Office Action, referring to cols. 3-5, col. 19:25-65, col. 20:1-45, col. 21:20-65, col. 22:1-55, col. 26:25-65, col. 27:1-55, col. 29:10-65, col. 18:20-60, and col. 15:10-60.) Appellants respectfully disagree. Appellants submit that there is simply no specific indication in the Action that the icon or ICA of Howe (the alleged first "interactive" application) has some records that may be replaced by records of the interactive program of Howe. Further, nothing within Filepp remedies this deficiency.

Because these elements are not specifically indicated in the Action as recited in Howe, the Examiner may be suggesting that this claimed element ("selecting a second interactive application, and broadcasting records of the second interactive application to the reception device in place of at least some of the records of the first interactive application") is inherent in Howe (or Filepp). The Office Action has not established a *prima facie* case of inherency because, as recited in MPEP § 2112, "In relying upon the theory of inherency, the examiner must provide basis in fact and/or technical reasoning to

reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art," citing Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original).

The Office Action does not even assert that the allegedly inherent characteristic is necessary, let alone provide a basis in fact and/or technical reasoning for the inherency.

Appellants respectfully submit that "selecting a second interactive application, and broadcasting records of the second interactive application to the reception device in place of at least some of the records of the first interactive application" as claimed in independent claim 1 does not necessarily flow from Howe or Filepp.

Appellants respectfully submit that the Examiner has not provided basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. As such, Appellants respectfully submit that the Office Action did not make out a *prima facie* case of obviousness, because Howe and Filepp fail to recite all of the elements of independent claim 1.

At page 16 of the Office Action mailed 05/31/05, the Examiner suggests that col. 3, lines 30-55 of Howe outlines the method of using a callback address in order to provide the seamless transition from one interactive program to another. Appellants can only assume that the Examiner is suggesting that the first interactive program is the callback address (ICA) itself. Also, at page 3 of the Advisory Action, the Examiner suggests that the screen image icon itself (column 4, lines 1-5 of Howe) may be considered an interactive application that the subscribers use to set the STB into an interactive state. These suggestions by the Examiner are addressed below.

Appellants submit that neither the callback address nor the icon of Howe is an "interactive application" as claimed. In fact, the callback address (ICA) and the icon are only means to an interactive program of Howe. The screen image is considered additional information of the interactive program in that the screen image includes the access information (ICA) to the interactive program (column 4, lines 1-5 of Howe).

Appellants further submit that the callback address (ICA) and the screen image are one-way mediums, and thus, not interactive. "Interactive" is defined, at http://foldoc.doc.ic.ac.uk/foldoc/foldoc.cgi?interactive, as: "A term describing a program whose input and output are interleaved, like a conversation, allowing the user's input to depend on earlier output from the same run." At www.netlingo.com, the definition of "Interactive" includes allowing...

> "a user to manipulate the outcome of certain events (for instance, by filling out a form, requesting a new Web page, or taking an online survey) within a two-way communications system that supports direct and continual responses. As opposed to static media (something that stays the same) or television (which is essentially a one-way medium), the Internet is interactive and dynamic in that all computers require input.

Clearly, the callback address and the icon of Howe are not interactive, but rather one-way mediums. As such, Howe cannot recite switching between two "interactive" applications.

Additionally, at page 16 of the Office Action mailed 05/31/05, the Examiner suggests that "Howe disclosed replacing one interactive application with a second interactive application" because "Howe outlines the method of using a callback address in order to provide the seamless transition from one interactive program to another." (citing col. 3, lines 30-55 of Howe). Because the callback address is not an interactive application, as shown above, the Examiner's suggestion is moot. Further, the Howe patent must be read consistently with itself, and in so doing, one must conclude that the first medium (e.g., broadcast) and the second medium (e.g., interactive) are different. Howe, col. 2, line 49 to col. 3, line 20, cited above. And as shown and discussed above, Howe, in fact, clearly discloses switching between the two *different* mediums, e.g., from a program channel being viewed to a different interactive channel, again, *not switching between two interactive applications.*

In view of the above it is submitted that claim 1 is allowable.

Claim 40 also includes the element of "broadcasting records of the customized version of the first interactive application to the reception device in place of the records

of the first interactive application... for execution of the customized application in conjunction with the additional record." In view of the above it is also submitted that claim 40 is allowable.

Claim 41 includes the elements of:

receiving at the broadcast system a broadcast signal including at least one record of a first interactive application;

selecting a second interactive application, and *broadcasting records of the second interactive application to the reception device in place of at least some of the records of the first interactive application*, for execution of the second interactive application by the reception device;

receiving at the broadcast system in the broadcast signal one or more additional records of the first interactive application; and

providing to a broadcast system selected ones of the additional records for broadcast to the reception device, for the reception device to execute of the second interactive application in conjunction with the additional records.

In view of the remarks above it is submitted that claim 41 is also allowable.

Claim 18 includes the elements of:

a server that maintains state information for the first interactive application in response to the output signals from the code detector, and in response to the state of the first interactive application, outputs commands to start or stop the output of updated records of the interactive application;

a code reader, adapted to read interactive application codes of an interactive application and to identify records of the first interactive application that are updates of corresponding records of a second interactive application stored in a broadcast server, and communicatively coupled to the server, that

selectively provides the updated records to the broadcast server in response to the commands from the server...

The Office Action submits that the above elements are described at Col. 18, lines 40-50 in Howe. The referenced section reads as follows:

> After receiving the request for the ICA, the interactive server 5 assigns an ICA consistent with the state of the interactive server 5 and its memory 8 and other storage devices 8A and 9. The video service provider 1 also stores the application received from the Content Provider in a suitable storage device, such as video storage 9, and stores the ICA and perhaps information relating to the interactive application in a database maintained, for example, in disk storage 8A. Such additional information may include an application ID selected by the video service provider 1. (Howe, column 18, lines 40-50).

It is submitted that the above section in no way describes or even suggests all the elements of claim 18 as set out above. For example, the above section from Howe does not describe or even suggest the element of "a code reader, adapted to **read interactive application codes** of an interactive application and to identify records of the **first interactive application that are updates of corresponding records of a second interactive application** stored in a broadcast server." (emphasis added). This element is also not described or even suggested in Filepp.

In view of the above, it is submitted that claim 18 is allowable. As claims 19-39 are dependent upon claim 18, they are also allowable.

(2) There Is A Lack Of Motivation To Combine Howe And Filepp To Arrive At Present Claims.

Motivation to combine or modify the prior art is lacking when the prior art teaches away from the claimed combination. *In re Gurley*, 27 F.3d 551, 31 USPQ 2d 1130, 1131 (Fed. Cir. 1994); *United States v. Adams*, 383 U.S. 39, 52, 148 USPQ 479, 484 (1966); *In re Sponnoble*, 405 F.2d 578, 587, 160 USPQ 237, 244 (C.C.P.A. 1969); *In re Caldwell*, 319 F.2d 254, 256, 138 USPQ 243, 245 (C.C.P.A. 1963).

Because Howe recites passing from one medium (e.g., broadcast) to another (e.g., interactive) at col. 2:58-59, Howe teaches away from "broadcasting records of the second interactive application to the reception device in place of at least some of the records of the first interactive application" as recited in independent claim 1, for instance.

Because Howe teaches away from the independent claims, claims 1, 18, 40 and 41 are patentably distinguishable over Howe and Filepp.

In addition, the Examiner must avoid hindsight. *In re Bond*, 910 F.2d 831, 834, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990). "Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor." *Para-Ordnance Mfg., Inc. v. SGS Importers Int'l, Inc.*, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995), *cert. denied*, 117 S.Ct. 80 (1996) citing *W.L. Gore & Assocs. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13, cert. denied, 469 U.S. 851 (1984).

Because Howe recites switching between a broadcast program and an interactive application, and because Filepp teaches locating records in a database, the only way to combine Howe and Filepp is through hindsight. There is simply no reason for one skilled in the art to modify Howe in looking to Filepp to recite the claimed elements.

Because obviousness may not be established using hindsight and may not be established in view of the teachings or suggestions of the Appellants, the Action does not show that there is some suggestion or motivation to combine Howe and Filepp. For this additional reason, the Office Action has not established a *prima facie* case of obviousness for independent claims 1, 18, 40, and 41, and their respective dependents.

Further, the test for obviousness under §103 must take into consideration the invention as a whole; that is, one must consider the particular problem solved by the combination of elements that define the invention. *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir. 1985). This is part of the "subject matter as a whole" which should always be considered in determining the obviousness of an invention under 35 USC §103. *In re Spinnoble,* 405 F. 2d 578, 585, 160 USPQ 237, 243 (CCPA 1969). MPEP §2141.02.

In addition to the differences listed above, **the problems that the Howe reference and the current application are trying to solve are quite different.** Appellants respectfully submit that Howe is directed to solving problems associated with switching between a broadcast program and an interactive application, not in switching between two interactive applications. This problem of Howe is emphasized with a discussion of difficulties in switching due to the differences between broadcast television and interactive television, in that they are of *different* mediums from *"different* sources and use *different* modulation techniques over *different* transmission paths." (Howe, Background of the Invention, column 2, line 49 to column 3, line 20). (emphasis added).

In contrast, Appellants are attempting to update an interactive or customized application broadcast from a broadcast system to a reception device. Appellants attempt to solve these problems by, e.g., as claimed in claim 1, receiving at the broadcast system a broadcast signal including at least one record of a first interactive application; selecting a second interactive application, and broadcasting records of the second interactive application to the reception device in place of at least some of the records of the first interactive application, for execution of the second interactive application by the reception device; receiving at the broadcast system in the broadcast signal one or more additional records of the first interactive application; and broadcasting from the broadcast system selected ones of the additional records to the reception device, for execution of the second interactive application in conjunction with the additional records.

There is no indication in Howe that Howe is attempting to update an interactive or customized application broadcast from a broadcast system to a reception device in the manner claimed in the present application. Therefore, Howe and Appellants are clearly attempting to solve different problems and therefore seek very different solutions.

The problems that the Filepp reference and the current application are trying to solve are also quite different. Appellants respectfully submit that Filepp is directed to solving problems associated with locating records in a database. (Filepp, Summary, col. 2, lines 48-64).

There is no indication in Filepp that Filepp is attempting to update an interactive or customized application broadcast from a broadcast system to a reception device in the manner claimed in the present application. Therefore, Filepp and Appellants are clearly attempting to solve different problems and therefore seek very different solutions.

Accordingly, there is clearly no suggestion or motivation in Howe or Filepp or to those skilled in the art to combine these references to arrive at the present claims. Because of lack of motivation to combine Howe and Filepp to arrive at the present claims, the rejection under 35 U.S.C. §103(a) cannot stand. Appellants respectfully request reconsideration and allowance of independent claims 1, 18, 40, and 41.

Because a *prima facie* case of obviousness has not been established, independent claims 1, 18, 40 and 41 should be allowable over the combination of Howe and Filepp. Dependent claims 2-17 and 19-39 should also be allowable, since it is respectfully noted that if an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is also nonobvious. *See* M.P.E.P. 2143.03. Appellants consider additional elements of claims 2-17 and 19-39 to further distinguish over the cited references, and Appellants reserve the right to present arguments to this effect at a later date. Therefore, the Appellants respectfully requests reconsideration and withdrawal of the rejections under 35 U.S.C. 103.

8. SUMMARY

It is respectfully submitted that no *prima facie* case of obviousness under 35 U.S.C. §103 has been established by the Office. Therefore, it is respectfully requested that the rejections of claims 1-41 be reconsidered and withdrawn. The Appellants respectfully submits that all of the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone the Appellants' attorney, Lucinda Price (352) 373-8804 (Gainesville, Florida), to facilitate prosecution of this Application. If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,
BRIAN C. GEBHARDT ET AL.

By their Representatives,
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Date Nov. 2, 2005 By _____
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Reg. No. 42,270

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Appeal Brief – Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 2 day of November, 2005.

JACLYN SKIBA
Name

_____
Signature

CLAIMS APPENDIX

1. (Rejected) A computer implemented method of updating an interactive application broadcast from a broadcast system to a reception device over a transmission medium, the method comprising:

receiving at the broadcast system a broadcast signal including at least one record of a first interactive application;

selecting a second interactive application, and broadcasting records of the second interactive application to the reception device in place of at least some of the records of the first interactive application, for execution of the second interactive application by the reception device;

receiving at the broadcast system in the broadcast signal one or more additional records of the first interactive application; and

broadcasting from the broadcast system selected ones of the additional records to the reception device, for execution of the second interactive application in conjunction with the additional records.

2. (Rejected) The method of claim 1, wherein the second interactive application is a customized version of the first interactive application.

3. (Rejected) The method of claim 1, wherein the first interactive application is broadcast over a first transport protocol, and the second interactive application is broadcast over a second transport protocol.

4. (Rejected) The method of claim 1, wherein the first interactive application is broadcast over an analog transport protocol, and the second interactive application is broadcast over a digital transport protocol.

5. (Rejected) The method of claim 4, wherein the analog transport protocol is the vertical blanking interval of an analog broadcast television signal.

6. (Rejected) The method of claim 4, wherein the digital transport protocol is an MPEG signal.

7. (Rejected) The method of claim 4, wherein the digital transport protocol is an ATVEF signal.

8. (Rejected) The method of claim 4, wherein the digital transport protocol is an HTTP signal.

9. (Rejected) The method of claim 4, wherein broadcasting the additional records to the reception device further comprises converting the updated records from a format compatible with the analog transport protocol to a format compatible with the digital transport protocol.

10. (Rejected) The method of claim 1, wherein broadcasting selected updated additional records to the reception device further comprises:

selecting an additional record that is an update of a corresponding record of the second interactive application.

11. (Rejected) The method of claim 10, wherein selecting an additional record that is an update of a corresponding record of the second interactive application further comprises:

storing for each record of the first interactive application a current sequence number;

determining whether a sequence number for a received additional record of the first interactive application exceeds the current sequence number for the record; and

responsive to the determination that the sequence number exceeds the stored sequence number, selecting the additional record, and adjusting the stored sequence number for the additional record to the received sequence number.

12. (Rejected) The method of claim 10, wherein selecting an additional record that is an update of a corresponding record of the second interactive application further comprises:

storing for each record of the first interactive application a current sequence number;

determining for each additional record of the first interactive application whether the record is an update by identifying an update flag;

for each additional record having an update flag, determining whether to utilize the additional record by determining whether a sequence number for a received additional record of the interactive application exceeds the current sequence number for the record; and

responsive to the determination that the sequence number exceeds the stored sequence number, adjusting the stored sequence number for the additional record to the received sequence number.

13. (Rejected) The method of claim 1, wherein broadcasting a selected additional record to the reception device further comprises:

broadcasting an updated additional record only if the additional record is compatible with a corresponding record in the second interactive application.

14. (Rejected) The method of claim 1, wherein broadcasting the selected additional records to the reception device further comprises:

determining whether the additional records are compatible with corresponding records of the second interactive application by:

matching a first checksum of the non-content portions of the additional records of the first interactive application with a first checksum on the non-content portions of the corresponding records containing variable content.

15. (Rejected) The method of claim 14, wherein the non-content portions of the records include at least one of the group consisting of:

record ID;

record type; and

record name.

16. (Rejected) The method of claim 14, wherein broadcasting the selected additional records to the reception device further comprises:

matching a second checksum of static portions of records of the first interactive application with a second checksum of static portions of records of the second interactive application.

17. (Rejected) The method of claim 1, further comprising:

receiving at the broadcast system in the broadcast signal, control information for controlling execution of the second interactive application at the reception device; and

broadcasting the control information to the reception device.

18. (Rejected) A system for updating an interactive application broadcast from a broadcast system to a reception device over a transmission medium, the system comprising:

a code detector adapted to receive a broadcast signal and identify codes in the signal that relate to a change in a state of a first interactive application, and that provides outputs signals indicative of the change of state;

a server that maintains state information for the first interactive application in response to the output signals from the code detector, and in response to the state of the first interactive application, outputs commands to start or stop the output of updated records of the interactive application;

a code reader, adapted to read interactive application codes of an interactive application and to identify records of the first interactive application that are updates of corresponding records of a second interactive application stored in a broadcast server, and communicatively coupled to the server, that selectively

provides the updated records to the broadcast server in response to the commands from the server; and

a broadcast server that broadcasts the second interactive application to reception devices for execution by the reception devices in place of the first interactive application, and selectively broadcasts the updated records to the reception devices, for execution of the second interactive application in conjunction with the updated records.

19. (Rejected) The system of claim 18, wherein the code detector identifies codes that relates to a change in the state of an interactive application by detecting changes in an interactive application identification code.

20. (Rejected) The system of claim 18, wherein the code detector identifies codes that relate to a change in the state of an interactive application by detecting a new interactive application identification code.

21. (Rejected) The system of claim 20, wherein the server in response to an output signal of the code detector indicating a new interactive identification code, commands the code reader to start providing updated records of the broadcast server.

22. (Rejected) The system of claim 18, wherein the code detector identifies codes that relate to a change in the state of an interactive application by detecting an absence of an interactive application identification code in the broadcast signal for a predetermined amount of time.

23. (Rejected) The system of claim 22, wherein the server in response to an output signal of the code detector indicating an absence of the interactive identification code for the predetermined time, commands the code reader to stop providing updated records for the second interactive application to the broadcast server.

24. (Rejected) The system of claim 18, wherein the code reader caches updated records prior to receiving a command from the server to provide the updated records to the broadcast server.

25. (Rejected) The system of claim 18, wherein the code detector detects commands for controlling execution of the first interactive application in a preserved portion of the broadcast signal, and the code reader provides the commands to the broadcast server for broadcasting to the reception device.

26. (Rejected) The system of claim 18, wherein the second interactive application is a customized version of the first interactive application.

27. (Rejected) The system of claim 18, wherein the first interactive application is received by the code reader over a first transport protocol, and the second interactive application is broadcast over a second transport protocol.

28. (Rejected) The system of claim 18, wherein the first interactive application is received by the code reader over an analog transport protocol, and the second interactive application is broadcast over a digital transport protocol.

29. (Rejected) The system of claim 28, wherein the analog transport protocol is the vertical blanking interval of an analog broadcast television signal.

30. (Rejected) The system of claim 28, wherein the digital transport protocol is an MPEG signal.

31. (Rejected) The system of claim 28, wherein the digital transport protocol is an ATVEF signal.

32. (Rejected) The system of claim 28, wherein the digital transport protocol is an HTTP signal.

33. (Rejected) The system of claim 18, wherein the code reader converts the updated records from a format compatible with the analog transport protocol to a format compatible with the digital transport protocol.

34. (Rejected) The system of claim 18, wherein the code reader:

stores for each record of the first interactive application a current sequence number;

determines whether a sequence number for a received record of the first interactive application exceeds the current sequence number for the record; and

responsive to determining that the sequence number exceeds the stored sequence number, selects the record as an updated record, and adjusts the stored sequence number for the record to the received sequence number.

35. (Rejected) The system of claim 18, wherein the code reader:

stores for each record of the first interactive application a current sequence number;

determines for each record of the first interactive application whether the record is an update by identifying an update flag;

for each record having an update flag, determines whether to utilize the record by determining whether a sequence number for a received record of the interactive application exceeds the current sequence number for the record; and

responsive to determining that the sequence number exceeds the stored sequence number, adjusts the stored sequence number for the record to the received sequence number.

36. (Rejected) The system of claim 18, wherein the content reader provides an updated record to the broadcast server only if the record is compatible with a corresponding record in the second interactive application.

37. (Rejected) The system of claim 36, wherein the content reader determines whether a record is compatible with a corresponding record in the second interactive application by matching a first checksum of the non-content portions of the records of the first interactive application with a first checksum on the non-content portions of the corresponding records containing variable content.

38. (Rejected) The system of claim 37, wherein the non-content portions of the records include at least one of the group consisting of:

record ID;

record type; and

record name.

39. (Rejected) The system of claim 37, wherein the content reader determines whether a record is compatible by matching a second checksum of static portions of records of the first interactive application with a second checksum of static portions of records of the second interactive application.

40. (Rejected) A computer implemented method of updating a customized interactive application broadcast from a broadcast system to a reception device over a transmission medium, comprising:

receiving at the broadcast system a broadcast including at least one record of first interactive application;

selecting a customized version of the first interactive application, and

broadcasting records of the customized version of the first interactive application to the reception device in place of the records of the first interactive application;

receiving at the broadcast system additional records of the first interactive application; and

responsive to determining that an additional record is an update of a corresponding record of the customized interactive application, broadcasting the additional record to the reception device, for execution of the customized application in conjunction with the additional record.

41. (Rejected) A computer readable medium for updating an interactive application broadcast from a broadcast system to a reception device over a transmission medium, the computer readable medium coupled to a processor, for controlling the processor to perform the operations of:

receiving at the broadcast system a broadcast signal including at least one record of a first interactive application;

selecting a second interactive application, and broadcasting records of the second interactive application to the reception device in place of at least some of the records of the first interactive application, for execution of the second interactive application by the reception device;

receiving at the broadcast system in the broadcast signal one or more additional records of the first interactive application; and

providing to a broadcast system selected ones of the additional records for broadcast to the reception device, for the reception device to execute of the second interactive application in conjunction with the additional records.

EVIDENCE APPENDIX

NONE.

RELATED PROCEEDINGS APPENDIX

NONE.